Changes to the Specification:

Please replace four consecutive paragraphs found in the specification starting on page 3, line 15 and continuing to page 5, line 11, with the clean version that follows. No new matter has been added to the specification. The changes made to the paragraphs below include adding a reference that "Bluetooth is a registered trademark of the Bluetooth Special Interest Group" and adding the trademark symbol where appropriate. A version of these paragraphs has been appended to this document with changes to the text clearly marked.

Clean version of portions of the Specification

The modulated Radio Frequency (RF) signals received at an antenna 20 contain information that may be recovered in a receiver 30 of the electronic system. A Low Noise Amplifier (LNA) 30 may receive and amplify the incoming modulated RF signals. A subtractor circuit 40 may be connected to the output of LNA 30. The output signal from subtractor circuit 40 may be passed to RF mixer 50 along with a generated Local Oscillator (LO) signal. RF mixer 50 may down convert the high frequency modulated signal to a lower Intermediate Frequency (IF) signal. Thus, the modulated signal and the LO signal may be "mixed" to translate the carrier frequency of the modulated signal from the RF range to the IF range. The down converted signals may then be amplified by a gain amplifier 60. The amplified signal may be converted by an Analog-to-Digital Converter (ADC) 80 from analog signals to a digital value that is proportional to the input value of the analog signals. The digital values following the Bluetooth Special Interest Group (Bluetooth is a registered trademark of the Bluetooth Special Interest Group) specification may be processed in the remaining portion of a Bluetooth™ receiver 90 and the digital signals following the Institute of Electrical and Electronics Engineers (IEEE) 802.11b specification may be processed in the remaining portion of an 802.11b receiver 100. Receiver 90 may include channel filters, a demodulator and circuits for other baseband processing for Bluetooth™ and receiver 100 may include channel filters, a demodulator and circuits for other baseband processing for IEEE 802.11b.

A transmitter 230 of transceiver 10 may transmit data formatted in accordance with the Bluetooth™ specification as received from TX Bluetooth™ block 190 or data formatted for the IEEE 802.11b specification as received from TX 802.11b block 200. TX Bluetooth™ block 190 may provide the baseband processing for Bluetooth™ such as, for example, symbol mapping and

modulation, among other processing functions. TX 802.11b block 200 may provide the 802.11 baseband processing. Transmitter 230 may use a Digital-to-Analog Converter (DAC) 180 to generate analog output signals that are proportional to the input value of the digital values stored in the register. The analog signal may be provided to a gain amplifier 160. The output signal from gain amplifier 160 may be passed to mixer 150 along with a generated Local Oscillator (LO) signal. Mixer 150 may up convert the modulated signal to an RF signal. The up converted signals may then be amplified by a gain amplifier 140 and passed to antenna 120 for transmission.

Transceiver 10 includes an adaptive interface cancellation circuit 110. Cancellation circuit 110 may receive data from receiver 30 and transmitter 230 and generate an output signal that may be fed back to subtractor circuit 40. More specifically, cancellation circuit 110 may receive the data presented to DAC 180 and the data generated by ADC 80. The data at the input to DAC 180 may be a high quality copy of the signal that is being prepared for transmission. The data at the output of ADC 80 may be another copy of that transmitted signal as received through receiver 30.

A' cont'd

In operation, an electronic device such as transceiver 10 may operate different protocols and may receive signals whose frequencies periodically overlap. In such cases, transmitter 230 may transmit on the same frequency that receiver 30 or another transceiver is transmitting and a collision may occur. In other words, the electronic device may process signals that overlap when both devices are transferring information. Although the scope of the present invention is not limited in this respect, one transceiver may be selected to process signals using the Institute of Electrical and Electronics Engineers (IEEE) 802.11b specification while another transceiver may process signals using the Bluetooth™ specification. Thus, the integrated RF front end of the transceiver may simultaneously carry both Bluetooth™ and IEEE 802.11b signals. It should be pointed out that two devices, one operating with IEEE 802.11b and another with Bluetooth™ radio, may operate in common frequency space about 28 percent of the time (79 hopping channels at 1MHz each divided by 22MHz = 28%). Thus, without adaptive interface, the opposing transmitters may have interference about 28 percent of the time.